

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte F. DUANE WILLIAMS, MICHAEL L. BISHOP,  
JANET B. CALLAHAN and BEMJAMIN CHEMELLI

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Appeal No. 1998-0318  
Application No. 08/539,466

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ON BRIEF

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Before ABRAMS, STAAB, and NASE, Administrative Patent Judges.  
ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 23-57, which are all of the claims pending in this application.

We AFFIRM-IN-PART.

### BACKGROUND

The appellants' invention relates to a method of sampling micro-volumes of fluid from a micro-sample tube. An understanding of the invention can be derived from a reading of exemplary claim 23, which appears in the appendix to the appellants' Brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Charlton <u>et al.</u> (Charlton)	4,106,907	Aug. 15, 1978
Hulette <u>et al.</u> (Hulette)	5,236,666	Aug. 17, 1993
Cathcart <u>et al.</u> (Cathcart)	5,443,791	Aug. 22, 1995

Cole-Parmer Instrument Company catalog 1993-1994, pages 1409-1411 (Cole-Parmer).

Claims 25 and 40-57 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claims 23-39 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hulette in view of Charlton and Cole-Parmer.<sup>1</sup>

Claims 40-57 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hulette in view of Charlton, Cole-Parmer and Cathcart.

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<sup>1</sup> This rejection erroneously was stated in the Supplemental Answer as being directed to claims 23-29. However, it is clear that it should apply to claims 23-39. See Paper No. 14.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the Supplemental Answer (Paper No. 25) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 22) and Reply Brief (Paper No. 24) for the appellants' arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, the applied prior art references, the respective positions articulated by the appellants and the examiner, and the guidance provided by our reviewing court. As a consequence of our review, we make the determinations which follow.

#### The Rejection Under 35 U.S.C. § 112, First Paragraph

Claims 25 and 40-57 stand rejected as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The examiner has not explained why claim 25 runs afoul of the first paragraph of Section 112, and the reason is not apparent to us. This being the case, we will not sustain the rejection of claim 25 under Section 112.

The examiner's problem with claims 40-57 is grounded in the fact that some of the subject matter now set forth in claims 40 and 41, namely, the liquid level sensing and control system, was not disclosed in the specification as originally filed. The examiner points out that this feature is based upon Figure 9 and the explanation of it which later was entered into the specification (Papers No. 13 and 16), and takes the position that the specification thus would not have conveyed to one skilled in the art that the appellants had possession of the invention, as presently claimed, when the application was filed (Supplemental Answer, pages 4, 5 and 10-12). The appellants argue in rebuttal that the added material is found in Keiter U.S. Patent No. 5,178,019, which was incorporated by reference into the specification on page 1, and that therefore the insertion of material from this reference into the present application "is proper" (Brief, page 6). However, we find ourselves in agreement with the examiner, and the rejection of claims 40-57 under Section 112 is sustained. Our reasoning follows.

Independent claim 40 recites the step of "automatically lowering the automated probe . . . [until] a liquid level sensor detects that the probe has reached the fluid sample, whereupon a control signal is sent . . . to move said probe past the surface of said fluid sample a predetermined distance." Dependent claim 41 adds the limitation that the liquid sensor is "a capacitive liquid level sensor which measures a change in capacitance between said automated probe and the chassis of said automated analyzer." There is

absolutely no mention of these features in the specification as originally filed, or in the original claims or the claims substituted therefor by the preliminary amendment. Nor, in our view, is there any portion of the specification which would have conveyed to one skilled in this art that the above-quoted features were considered by the appellants to be part of their invention. Rather, after the first office action, this material was copied from Keiter, one of seven patents listed on page 1 of the originally filed specification under the heading of “CROSS REFERENCE TO RELATED APPLICATIONS.” It is noteworthy that the copying was not even from the one patent of the seven (Hulette et al U.S. Patent No. 5,236,666) which was discussed in the appellants' specification. We emphasize again that there is not even a mention in the originally filed specification of an automated system in which contact of the probe with the surface of the sample activates a liquid level sensor that sends a control signal to a controller, much less that this is considered to be part of the appellants' invention, or that the system disclosed by Keiter is preferred. From our perspective, the examiner therefore is correct in finding that the specification fails to establish that the appellants had possession of the invention as now claimed at the time the application was filed. To conclude otherwise would be to open the door to an applicant to incorporate thousands of patents into a specification by reference with an eye toward later searching through them for features that could be added to the claims of the application to cause them to patentably define over the applied prior art. Permitting this

clearly would subvert the requirement of 35 U.S.C. § 112, first paragraph, that the inventor(s) describe "the invention" in the specification "in such full, clear, concise, and exact terms . . . ." <sup>2</sup>

We are not persuaded by the appellants' arguments on page 6 of the Brief that the examiner's conclusion in this matter is in error. The first argument, which merely asserts that the examiner is wrong, that is, that the mere incorporation by reference satisfies the requirements of the first paragraph of section 112, is not substantiated by citation to supporting legal authority. The second, that the disclosed micro-sample tube is "particularly beneficial in a method with liquid level sensing," simply begs the question.

The rejection of claims 40-57 under 35 U.S.C. § 112, first paragraph, is sustained.

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<sup>2</sup>For a discussion of the PTO's position regarding the incorporation of patents into the specification of an application by reference, see MPEP Section 608.01(p).

The Rejections Under 35 U.S.C. § 103

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellants' disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

Independent claim 23 stands rejected as being unpatentable over Hulette in view of Charlton and Cole-Parmer. It is the examiner's view that Hulette discloses all of the subject matter recited in the claim except for the shape of the tube, but that such is taught by Charlton and Cole-Parmer, and it would have been obvious to one of ordinary skill in the art to replace the sampling tube of Hulette with one meeting the terms of claim 23 in view of the teachings of the two secondary references.<sup>3</sup> We do not agree.

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<sup>3</sup>Although expressed in the rejection as Hulette in view of Charlton and Cole-  
(continued...)

Hulette provides no description of the sampling tube, but it appears from Figure 2 to be in the shape of what might be called a conventional tube, that is, a right cylinder having a rounded bottom. As such, this would constitute exactly the type of tube over which the appellants believe their invention to be an improvement with regard to handling micro-samples. At the very least, the Hulette tube differs from that recited in claim 23 in that it does not have an inner portion with a convex curved slope. Charlton discloses a tube for use in a centrifuge which has an end portion that is internally inwardly sloped to define a convex curve, in the manner required by claim 23. Nevertheless, it is our view that Hulette and Charlton fail to establish a prima facie case of obviousness with regard to the subject matter recited in claim 23 for lack of suggestion to combine the references in the manner proposed by the examiner. It is axiomatic that the mere fact that the prior art structure could be modified does not make such a modification obvious unless the prior art suggests the desirability of doing so. See In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). We fail to perceive any teaching, suggestion or incentive which would have led one of ordinary skill in the art to replace the sample tube disclosed by Hulette with that of Charlton. Hulette is concerned with monitoring changes in the optical characteristics of a reaction volume in a sample tube (column 1, lines 28-36). While the

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<sup>3</sup>(...continued)

Parmer, it appears to us from the examiner's explanation of the rejection that the secondary references are to be considered as alternatives.



system includes means for aspirating material from the sample tubes, Hulette evidences no concern for dealing with micro-samples and the attendant problem of preventing gouging of the micro-sample tube during insertion of a probe. The Charlton tube is used in a centrifuge apparatus, and is tapered for the purposes of providing a reservoir for the particulate material that moves outwardly during the centrifuge operation (column 1, lines 28-31) and allowing room within the diameter of the envelope of the sample tube for radiation shielding surrounding this tapered internal portion of the tube (column 2, lines 13-27). There would appear to be no reason why one of ordinary skill in the art would have been motivated to replace the conventionally-shaped sample tube of Hulette, which provides for optical scanning, with one shaped to accommodate radio-active particulate material in a centrifuge.

As for Cole-Parmer, it is our opinion that it cannot positively be established that any of the disclosed sample tubes includes a convexly curved interior wall portion. This being the case, the rejection fails at the outset, for even if the required suggestion to combine the teachings were present, the result would not be the structure recited in claim 23.

Considering the two secondary references collectively, rather than alternatively, does not alter our conclusion.

We therefore will not sustain the Section 103 rejection of independent claim 23 or, it follows, of claims 24-39, which depend therefrom.

Claims 40-57 stand rejected as being unpatentable over Hulette in view of Charlton, Cole-Parmer, and Cathcart. The method recited in independent claim 40 contains the same requirements with regard to the structure of the sample tube as claim 23. Adding Cathcart to the combination fails to alleviate the problems discussed above with regard to claim 23. This being the case, the rejection of claims 40-57 under 35 U.S.C. § 103 also is not sustained.

#### SUMMARY

The rejection of claim 25 under 35 U.S.C. § 112, first paragraph, is not sustained.

The rejection of claims 40-57 under 35 U.S.C. § 112, first paragraph, is sustained

The rejection of claims 23-39 under 35 U.S.C. § 103 is not sustained.

The rejection of claims 40-57 under 35 U.S.C. § 103 is not sustained.

The decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

NEAL E. ABRAMS  
Administrative Patent Judge

LAWRENCE J. STAAB  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

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APPEAL NO. 1998-0318 - JUDGE ABRAMS  
APPLICATION NO. 08/539,466

APJ ABRAMS

APJ STAAB

APJ NASE

DECISION: **AFFIRMED-IN-PART**

Prepared By:

**DRAFT TYPED:** 22 Mar 02

**FINAL TYPED:**